CLAIMS

1. A method of damping vibration and enhancing resistance to foreign object damage and/or erosion of a metallic article, said method comprising applying to the article a vibration damping coating comprising ceramic and metallic components for the purpose of enhancing resistance of the coating to foreign object damage and/or erosion. thereby enhancing resistance of the article to foreign object damage and/or erosion; while substantially maintaining or enhancing vibration damping performance of the coating, thereby the substantially maintaining or enhancing vibration damping performance of the article; wherein a predominant component of an outermost portion of the coating is metallic; the ceramic vibration damping coating comprises a spinel; and the metallic article comprises a titanium alloy.

2. A method according to claim 1 wherein the

   a) metallic outermost portion of the vibration damping coating is chosen from a list of materials comprising titaniuim alloys; steel alloys; nickel or any alloy or adduct consisting predominantly of nickel;

   b) the spinel is a magnesia-alumina spinel.

3. A method according to claim 1, wherein the outermost metallic portion of the coating is substantially free of non-metallic intrusions or cavities.

4. A method according to claim 1, wherein the metal comprising the said outermost portion of the vibration damping coating is the same as the metal of the article beneath the coating.

5. A method according to claim 1, wherein at least one of the interfaces between the article and the coating and between the outermost portion of the coating and the remainder of the coating is continuously graded.

6. A vibration-damped metallic article in which vibration is damped by the method according to claim 1.

7. A vibration-damped metallic article comprising a titanium alloy, said article comprising a vibration damping coating comprising ceramic and metallic components, wherein a predominant component of an outermost portion of the coating is metallic and is substantially free of non-metallic intrusions or cavities and the ceramic vibration damping coating comprises a spinel.

8. A vibration damped metallic article according to claim 7, wherein:

   a) the metallic outermost portion of the vibration damping coating is chosen from a list of materials comprising titanium alloys; steel alloys; nickel or any alloy or adduct consisting predominantly of nickel;

   b) the spinel is a magnesia-alumina spinel.

9. A vibration-damped metallic article according to claim 7, wherein the metal comprising the said outermost portion of the vibration damping coating is the same as the metal of the article beneath the coating.

10. A vibration-damped metallic article according to claim 7, wherein at least one of the interfaces between the article and the coating and between the outermost portion of the coating and the remainder of the coating is continuously graded.

11. A vibration-damped article according to claim 7, wherein the coating consists essentially of one ceramic vibration damping layer and one metallic outermost

layer, optionally graded at one or more of the interfaces between the layers and between the ceramic layer and the article.

12. A vibration-damped article according to claim 11, being a component of a gas turbine engine.

13. A component of a gas turbine engine as claimed in claim 12, wherein the component is a air intake fan blade of a gas turbine engine.

14. A component of a gas turbine engine as claimed in claim 12, wherein the outermost layer consists essentially of a titanium alloy.

15. A component of a gas turbine as claimed in claim 13, wherein the outermost layer consists essentially of a titanium alloy.